

ABSTRACT

To obtain a Raney catalyst for fixed bed permitting a continuous use with a high initial activity and to produce a high purity sugar-alcohol at a low cost using the same.

For this object, sugar-alcohol is produced by:
using the powder type Raney catalyst made by using for the hydrogenation under the hydrogen pressure a lump form Raney catalyst made by (i) the first step for melting nickel and aluminum, (ii) the second step for obtaining quenched lump alloy by quenching droplets of said melted mixture and (iii) the third step for classifying and activating said quenched lump alloy as it is or once it is broken, collecting said lump form Raney catalyst, crushing into powder and reactivating, and hydrogenating sugars under the hydrogen pressure.